

**U.S. Department of the Interior
Bureau of Land Management**

Finding of No Significant Impact

DOI-BLM-NV-S010-2010-0184-EA

August 2010

Silver State Solar LLC, Bore Holes and Test Well

PREPARING OFFICE

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Chapter 1. Finding of No Significant Impact

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1.1. Environmental Assessment of Proposed Action

Silver State Solar, LLC submitted a Land Use Application and Permit (LUP) on March 8, 2010 to conduct geotechnical testing and for installation of an 8-inch-diameter test water well in support of the Silver State Solar Photovoltaic (PV) Projects NVN-085077 and NVN-085801, located in Primm, Nevada.

Use of these lands will allow Silver State Solar, LLC to determine the engineering characteristics of local soils and geology to develop a geological profile of the area. Geotechnical data collected will be analyzed to select the type and size of foundations required for the various project structures and equipment. Additionally, data about the soil resistance to electric current flow will be collected and used for the electrical grounding design to ensure the proposed project meets electrical safety codes.

Installation of the test water well will allow Silver State Solar, LLC to test the capacity of the underlying aquifer to assess its potential use to meet project development water demand. If the aquifer yield is satisfactory, the well will be left in place for subsequent use as a source of water for construction and operation of the proposed project. If the Silver State Solar proposed project does not proceed, NextLight will properly abandon the well at the Bureau of Land Managements (BLM) request.

1.2. Determination of Non-Significance

After analysis of the proposed of the proposed action, it is determined that this action will not have significant impacts on the human environment. Major issues associated with this action are: Migratory Birds, Wildlife, BLM Sensitive Wildlife Species, Recreation, Threatened, Endangered or Candidate Animal Species, and Water Resources/ Quality (drinking/surface/ground). These issues would be mitigated by the mitigation measures provided below, therefore negating any impact.

1.3. Mitigation Measures:

1. Migratory birds, including the BLM sensitive species the western burrowing owl (*Athene cunicularia*), may be present on the project site. 1) To prevent undue harm, habitat-altering projects or portions of projects should be scheduled outside bird breeding season. In upland desert habitats and ephemeral washes containing upland species, the season generally occurs between March 15th - July 30th.
2. If a project that may alter any breeding habitat has to occur during the breeding season, then a qualified biologist must survey the area for nests prior to commencement of construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation. If any active nests (containing eggs or young) are found, an appropriately-sized buffer area must be avoided until the young birds fledge.
3. The boreholes, and trenches should not be left open over night for public safety.
4. In addition due to a permitted OHV races in the area, the Silver State Solar LLC bore hole crews should not be operating from September. 6 - 16, 2010 and December 2 - 6, 2010.

5. The proponent is required to have an authorized biologist monitor routes to proposed bore holes that do not follow existing roads to prevent crushing of tortoises and burrows. Specifically, the authorized biologist will walk in front of vehicles while travelling over undisturbed habitat.
6. Furthermore, the authorized biologist will survey borehole sites prior to drilling wherein vegetation will be removed and remain onsite during drilling operations.
7. Water discharged from test well onto ground surface, either on road or existing wash, will attract wildlife, including desert tortoise to the area. Roads or washes with discharged water should be avoided for travel; if they do need to be used for travel, an authorized biologist should be present to monitor route for desert tortoise and other wildlife to avoid impacts
8. The trenches shall be dug in such a manner that the side and/or end walls are contoured to allow any animals that inadvertently fall in, a means to climb out. If such contouring compromises the excavation goals, the trenches can be covered with ply board or similar materials during hours of inactivity.
9. The applicant will be required to properly plug and abandon any boreholes or wells in accordance with Chapter 534 of the Nevada Administrative Code.
10. If the applicant chooses to keep the water well for use in a future project, the applicant is still responsible for the proper plugging and abandonment of that well if the future project does not get permitted.
11. Any water used in the described actions, including the pump test, must be provided by an established utility or under permit or waiver issued by the Nevada State Engineer.
12. If artesian water is located in any well or borehole it should be controlled as required in NRS 534.060(3).
13. Advise the applicant that water wells and boreholes will require prior approval from the Nevada Division of Water Resources.
14. An analysis (theis analyses) should be completed to determine if the pump test will impact any surrounding wells.
15. Minimization measures to reduce soil erosion and sedimentation as a result of increased runoff on disturbed areas would be implemented during construction and operation of the exploratory well.
16. The erosion and sediment control measures and environmental protection measures would be based on the type of disturbance expected, soil type, and the location of the site relative to sensitive resources. Limiting soil erosion and sedimentation will reduce potential impacts to water quality.
17. The applicant will comply with the Clean Water Act by obtaining any necessary permits.
18. During installation of the exploratory well, the applicant will temporarily fence the disturbed area to minimize impacts to wildlife.

19. Any drilling fluids or excess subsurface water encountered during drilling should be contained within the temporarily fenced site. Allow enough space for pits to retain drilling fluids and water if necessary. Once installation is complete, drilling fluids must be removed.
20. After completion, the test well will be capped to minimize potential for groundwater contamination.
21. Prior to the pump test, the applicant must provide information regarding rate and duration of test.
22. If rate exceeds that used during construction and operations, applicant must perform an analysis to determine how the pump test will impact surrounding groundwater users. This may be a simple Theis analysis or other similar hydrologic tool.
23. Any water used in the proposed actions, including the pump test, must be provided by an established utility or under permit or waiver issued by the Nevada State Engineer.
24. The applicant is required to have prior approval and permits from the Nevada Division of Water Resources.
25. Test wells must be properly plugged and abandoned in accordance with Chapter 534 of the Nevada Administrative Code.

Based on the analysis of potential environmental impacts (per Environmental Assessment DOI-BLM-NV-S010-2010-0184-EA), I have determined that the proposed action with the mitigation measures described above will not have any significant impacts on the environment and an environmental impact statement is not required.

1.4. Signatures:

Recommended by:

	Mark Chandler	August 2010
	Realty Specialist	

Approved by:

	Robert Ross	August 2010
	Field Manager	